



06-20-03

\$1636

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

RECEIVED
JUN 24 2003
TECH CENTER 1600/2900

In re Application of:

Kranz, et al.

: Group Art Unit: 1636

Serial No.: 09/731,242

: Examiner: Guzo, D.

Confirmation No.: 8588

Filed: December 6, 2000

For: HIGH AFFINITY TCR PROTEINS AND
METHODS

CERTIFICATE OF MAILING	
I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as Express Mail in an envelope addressed to: The Commissioner for Patents, PO Box 1450, Alexandria, VA 22313-1450	
June 18, 2003 Date	 Loretta Allemenos
EV 319245697 US Express Mail No.	

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
PO Box 1450
Alexandria, VA 22313-1450

Sir:

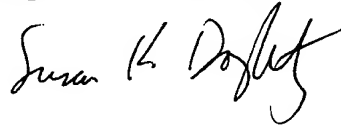
Further to the Information Disclosure Statement filed July 31, 2001, the Supplemental Information Disclosure Statement filed October 31, 2001 and the Supplemental Information Disclosure Statement filed January 15, 2003, the Examiner is respectfully requested to consider the additional references, copies enclosed, which may qualify as prior art. For the Examiner's convenience, the references are listed on the attached Patent and Trademark Office Form PTO-1449.

References known to the applicants have been listed on PTO-1449. That information is cited in a spirit of forthrightness and cooperation to enable the applicants to obtain that measure of protection for the invention to which there is entitlement. However, no representation is made that the listed art actually qualifies as prior art under the patent statute and the mere use of PTO-

1449 is not an admission that all listed references are prior art. No representation is made that applicants know of the best art.

This submission is accompanied by a check in the amount of \$180.00 in accordance with 37 C.F.R. 1.97(c)(2). If the enclosed amount is incorrect, please charge any deficiency or credit any overpayment to Deposit Account No. 07-1969.

Respectfully submitted,



Susan K. Doughty
Reg. No. 43,595

GREENLEE, WINNER AND SULLIVAN, P.C.
5370 Manhattan Circle, Suite 201
Boulder, CO 80303
Telephone: (303) 499-8080
Facsimile: (303) 499-8089
E-mail: winner@greenwin.com
Attorney docket No. 89-99
l1a: June 18, 2003



Form PTO 1449		
ATTY DOCKET NO. 89-99	SERIAL NO. 09/731,242	FILING DATE December 2000
APPLICANT Kranz et al.		GROUP 1636

RECEIVED
JUN 24 2003
TECH CENTER 1600/2800

U.S. PATENT DOCUMENTS

Exmr Initial	Document Number	Date (dd-mm-yyyy)	Name	Class	Subclass	Filing Date if Appropriate
	6,300,065	09-10-2001	Kieke, et al.	435	6	

FOREIGN PATENT DOCUMENTS

Document Number	Date	Country	Class	Subclass	Translation Yes/No
WO 99/36569	22-07-1999	PCT			

OTHER PRIOR ART (including Author, Title, Date, Pertinent Pages, etc.)

	Al-Ramadi BK, et al., (1995) Lack of strict correlation of functional sensitization with the apparent affinity of MHC/peptide complexes for the TCR. <i>J. Immunol.</i> 155: 662-673.
	Bellio M, et al., (1994), The V β complementarity determining region 1 of a major histocompatibility complex (MHC) class 1-restricted T cell receptor is involved in the recognition of peptide/MHC I and superantigen/MHC complex. <i>J. Exp. Med.</i> 179: 1087-1089.
	Bird, RE, et al., (1988), Single-chain antigen-binding proteins. <i>Science.</i> 242: 423-426
	Boder, E.T., et al., (2000), Yeast surface display for directed evolution of protein expression, affinity, and stability. <i>Methods Enzymol</i> 328, 430-444.
	Brodnicki, TC., (1996), Reactivity and epitope mapping of single-chain T cell receptors with monoclonal antibodies. <i>Mol. Immunol.</i> 33:253-263
	Cho, BK, et al., (1995), Characterization of a single-chain antibody to the β -chain of the T cell receptor. <i>J. Biol. Chem.</i> 270: 25819-25826.
	Cochran, et al., (2000), A diverse set of oligomeric class II MHC-peptide complexes for probing T-cell receptor interactions. <i>Chemistry & Biology</i> , Vol. 7:683-696.
	Corr M, et al., (1994), T cell receptor-MHC class I peptide interactions: affinity, kinetics, and specificity. <i>Science</i> 265: 946-949.
	Engel I, et al., (1988), Site-directed mutations in the VDJ junctional region of a T cell receptor β chain cause changes in antigenic peptide recognition. <i>Cell</i> 54: 473-484.
	Holler, Phillip D., et al., (2001), CD8- T Cell Transfectants that Express a High Affinity T Cell Receptor Exhibit Enhanced Peptide-dependent Activation. <i>J. Exp. Med.</i> 194: 1043-1052.

EXAMINER

DATE CONSIDERED

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.



RECEIVED
JUN 24 2003
TECH CENTER 1600/2900

Form PTO 1449		
ATTY DOCKET NO. 89-99	SERIAL NO. 09/731,242	FILING DATE December 6, 2000
APPLICANT Kranz et al.		GROUP 1636

		Holler, et al., (2002) TCRs with high affinity for foreign pMHC show self-reactivity. <i>Nature Immunology</i> , Published online 9 December 2002; doi:10.1038/ni863
		Holler, et al., (2003) Quantitative Analysis of the Contribution of TCR/pepMHC Affinity and CD8 to T Cell Activation, <i>Immunity</i> , 18:255-264.
		Holler, et al., (2000) <i>In vitro</i> evolution of a T cell receptor with high affinity for peptide/MHC, <i>PNAS</i> , 97:5387-5392.
		Hoogenboom, Hennie R., (1997) Designing and optimizing library selection strategies for generating high-affinity antibodies, <i>Tibtech</i> , 15:62-70.
		Kasibhatla S. et al., (1993) Simultaneous involvement of all six predicted antigen binding loops of the T cell receptor in recognition of the MHC/antigenic peptide complex. <i>J. Immunol.</i> 151:3140-51.
		Kieke, M.C., et al., (2001), High affinity T cell receptors from yeast display libraries block T cell activation by superantigens. <i>J Mol Biol</i> 307:1305-1315.
		Malchiodi EL, (1995), Superantigen binding to a T cell receptor β chain of known three-dimensional structure. <i>J. Exp. Med.</i> 182:1833-1845.
		Shusta, E.V., et al., (2000), Directed evolution of a stable scaffold for T-cell receptor engineering. <i>Nat Biotechnol</i> 18:754-759.
		Wittrup, K.D., (2000), The single cell as a microplate well. <i>Nat Biotechnol</i> 18:1039-1040.
		Yoon, ST., (1994), Both high and low avidity antibodies to the T cell receptor can have agonist or antagonist activity. <i>Immunity</i> 1:563-569.

EXAMINER	DATE CONSIDERED
*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	